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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	MM Docket No. _____
Amendment of Section 73.622(b),	)	RM-_____
Table of Allotments,	)	
Digital Television Broadcast Stations,	)	
(San Antonio, Texas)	)	

PETITION FOR RULEMAKING

Alamo Public Telecommunications Council ("Alamo"), by its attorneys and pursuant to Sections 1.401 *et seq.*, 1.420, and 73.623 of the Rules and Regulations of the Federal Communications Commission ("FCC" or "Commission"), 47 C.F.R. §§ 1.401 *et seq.*, 1.420, and 73.623 (1998), hereby petitions the Commission to amend the Table of Allotments for Digital Television Stations, 47 C.F.R. § 73.622(b), as follows:

	Channel No.	
City	**Present**	**Proposed**
San Antonio, Texas	20	8

The facts in support of this Petition are set forth below.

1. Alamo, a non-profit organization, is the licensee of Station KLRN, Channel *9, San Antonio, Texas, which is a member of the Public Broadcasting System ("PBS"). As a noncommercial educational licensee, Alamo relies for funding solely on its own fundraising efforts, including auctions and pledge drives, and various government grants. Alamo, like other noncommercial educational licensees, faces very substantial capital expenditure requirements in the transition to digital television and is seeking to

make that transition in the most cost-effective way possible, particularly because the funding for the transition will come from the public, either directly or ultimately through government grant programs. Accordingly, the assignment of its digital channel is a matter of great importance to Alamo.

2. The DTV Table of Allotments currently assigns DTV Channel 20 to Alamo. By this Petition, Alamo seeks to substitute DTV Channel 8 in lieu of DTV Channel 20 at San Antonio, Texas, for use by Station KLRN at the same transmitter site where KLRN's transmitting tower is currently located. [1] As explained in the attached Engineering Exhibit of Hammett & Edison, Inc. ("Engineering Exhibit"), DTV Channel 8 can be substituted for DTV Channel 20 in full compliance with all FCC rules and policies.

3. In February 1999, Channel 3 of Corpus Christi, Inc., the licensee of commercial television broadcast station KIII, Corpus Christi, Texas ("KIII"), filed a petition to amend the Table of Allotments for Digital Television (DTV) Stations by substituting DTV Channel 8 in lieu of DTV Channel 47. On September 8, 1999, in response to KIII's petition, the Commission released a Notice of Proposed Rule Making in the above-captioned rulemaking proceeding, which proposes to allot DTV Channel 8 in lieu of DTV Channel 47 as requested by KIII. *See* Notice of Proposed Rule Making, MM Docket No. 99-277, RM 9666 (released September 8, 1999). As demonstrated in the attached Engineering Exhibit and in the Reply Comments of Alamo filed in MM Docket No. 99-277, DTV Channel 8 can be substituted for DTV Channel 20 at San Antonio **as**

[1] The proposal is based on the corrected and more accurate coordinates for the KLRN tower: 29° 19' 38" N, 98° 21' 17" W (NAD27).

well as DTV Channel 47 at Corpus Christi in full compliance with the FCC's technical rules.[2]

4. The proposed substitution will serve the public interest in a variety of ways. First and foremost, the substitution will allow Alamo to avoid the very substantial and ultimately unrecoverable capital expenditure required to construct a UHF digital facility, which will be used only temporarily until the end of the DTV transition period when the Station will revert back to a VHF channel for digital operation. This is especially important for a noncommercial educational licensee such as KLRN, which relies entirely on public funding sources to provide a community-oriented noncommercial broadcasting service of inestimable value to the residents of San Antonio and the surrounding area. Second, as demonstrated in the attached Engineering Statement, the substitution of DTV Channel 8 for DTV Channel 20 at San Antonio would maximize efficient use of the radiofrequency spectrum because DTV Channel 8 would completely cover San Antonio with its F(50,90) 36 dBu contour and would serve a terrain-limited interference-free population of 1,456,522 persons.[3] Finally, the substitution of DTV

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[2] As shown by the attached OET-69 interference study, Figure 2, KLRN-DT operating on DTV Channel 8 would cause 0.4% of additional interference to the coverage that KIII-DT operating on DTV Channel 8 would otherwise have. Further, KLRN-DT operating on DTV Channel 8 would not cause more than 2% additional interference to any NTSC station or to any other DTV allotment, application, permit, or license. Finally, KIII-DT operating on DTV Channel 8 is predicted to cause only 0.7% new interference to KLRN-DT operating on DTV Channel 8.

Because the two proposals to substitute DTV Channel 8 at both Corpus Christi and San Antonio are not mutually exclusive, Alamo's petition does not constitute a counterproposal and thus was not required to be advanced in initial comments in MM Docket 99-277. *See, e.g.,* Amendment of Section 73.202(b), Table of Allotments, FM Broadcast Stations (De Ridder, Louisiana), Report and Order, MM Docket No. 98-209, RM-9406 (released July 23, 1999) ("A counterproposal is a proposal for an alternative and mutually exclusive allotment or set of allotments in the context of the proceeding in which the proposal is made").

[3] This is approximately three times the number of persons that KIII-DT operating on DTV Channel 8 will serve, even though Station KLRN will operate with only 8.3 kW of effective radiated power, compared to KIII's proposed 160 kW of effective radiated power.

Channel 8 at San Antonio will not cause harmful interference to low power television stations operating on NTSC Channel 7 in the San Antonio market and operating on NTSC Channels 7 and 8 in the Corpus Christi market.

CONCLUSION

Because DTV Channel 8 can be substituted for DTV Channel 20 at San Antonio, Texas, in full compliance with the Commission's rules and without precluding the substitution of DTV Channel 8 for DTV Channel 47 at Corpus Christi, Alamo respectfully requests the Commission to adopt expeditiously a Notice of Proposed Rule Making to amend the Table of Allotments for Digital Television Stations as set forth herein.

Respectfully submitted,

ALAMO PUBLIC
TELECOMMUNICATIONS COUNCIL

By: Margaret L. Tobey

Margaret L. Tobey
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Suite 5500
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202-887-1500

Its Attorneys

November 22, 1999

TV Station KLRN
NTSC Channel 9
San Antonio, Texas

Engineering Exhibit
in Support of Petition for
Rule Making to Substitute
DTV Channel 8 for DTV Channel 20
at San Antonio, Texas

November 16, 1999

HAMMETT & EDISON, INC.
CONSULTING ENGINEERS
SAN FRANCISCO

Statement of Hammett & Edison, Inc., Consulting Engineers

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained by the Alamo Public Telecommunications Council, licensee of TV Station KLRN, NTSC Channel 9, San Antonio, Texas, to prepare an engineering exhibit in support of a petition for rule making to amend the DTV Table of Allotments to substitute DTV Channel 8 for DTV Channel 20 at San Antonio, Texas.

Background Information

In the Sixth Report and Order to MM Docket 87-268, non-commercial Station KLRN-DT was assigned DTV Channel 20. KLRN prefers to construct its DTV facilities on an adjacent VHF channel, however, rather than on a UHF channel, citing several efficiencies that this would allow, as well the possibility of converting its existing NTSC transmitter to DTV use after the transition period, enabling a power increase at that time.

Accordingly, engineering studies have been undertaken to see if DTV Channel 8 could be substituted for DTV 20 at San Antonio. As will be demonstrated by the remainder of this engineering exhibit, such a channel substitution can be made in compliance with all FCC rules and policies. It should be noted that these studies take into account the proposed substitution of DTV Channel 8 for DTV Channel 47 at Corpus Christi, Texas (MM Docket 99-277); that is, DTV Channel 8 can be allocated to San Antonio in addition to the proposed co-channel DTV allocation at Corpus Christi.

The DTV Channel 8 facilities proposed for KLRN-DT as DTV Channel 8 are a Dielectric Type THV-6A8-R directional antenna with a main beam orientation of 315°T and a center-of-radiation height of 283 meters AGL, 434 meters AMSL, and 263 meters HAAT. The corrected and more accurate coordinates for the KLRN(TV) tower have been used, which are 29° 19' 38" N, 98° 21' 17" W (NAD 27). The proposed main-beam effective radiated power would be 8.3 kW. The attached Figure 1 shows the proposed azimuth pattern for KLRN-DT as D08.

KLRN-DT as D08 Would Not Be Mutually Exclusive with KIII-DT as D08

As shown by the attached OET-69 interference study, Figure 2, KLRN-DT as D08 would not be mutually exclusive with KIII-DT as D08: the KLRN-DT as D08 facilities would cause 0.4% of additional interference to the coverage that KIII-DT as D08 would otherwise have. Further, KLRN-DT as D08 would not cause more than 2% additional interference to any NTSC station, or to any other DTV allotment, application, permit, or license.

Nor would KIII-DT as D08 cause excessive interference to KLRN-DT as D08: as shown by the attached OET-69 interference study, Figure 3, KIII-DT as D08 is predicted to cause only 0.7% new interference to KLRN-DT as D08 compared to the interference-free service KLRN-DT as D08 would have with KIII-DT remaining on Channel 47.

KLRN-DT as D08 at 8.3 kW (DA) Would Completely Cover San Antonio

As shown by the attached Figure 4, an OET-69 coverage study for KLRN-DT as D08 and also with KIII-DT as D08, the proposed KLRN-DT as D08 facilities would completely cover San Antonio with its F(50,90) 36 dBu contour. Further, even after allowing for the 10,045 persons of unique interference caused by the KIII-DT as D08 operation, the KLRN-DT terrain-limited, interference-free population served would be 1,456,522 persons (1990 Census). By comparison, and as shown in the attached Figure 4, this would be approximately three times the number of persons the KIII-DT as D08 facilities would serve.

Mutual Interference Should be Treated as "Baseline" for OET-69 Purposes

In the event the Commission amends the DTV Table of Allotments to substitute DTV Channel 8 at San Antonio as well as at Corpus Christi, then, for future OET-69 purposes, the small amount of predicted interference these two allotments would cause to each other should be treated as "baseline" interference with respect to any subsequent modifications by KIII-DT, KLRN-DT, or other stations.

Mexican Concurrence

The proposed KLRN-DT as D08 site is 212 kilometers from the U.S.-Mexico border. Since this is within 275 kilometers of the Mexican border, concurrence by the Mexican government will have to be obtained. However, since there are no short-spacing problems to any Mexican NTSC stations or allotments, it is believed that such concurrence should be forthcoming.

No Impact to Station KJLF-LP, N07, San Antonio, from KLRN-DT as D08

Because of the proximity of Station KJLF-LP, NTSC Channel 7, San Antonio, to the proposed site for KLRN-DT as D08, and because class-maximum power is not being requested, and as documented by the attached Figures 6A and 6B, the existing KJLF-LP operation on N07 is not predicted to cause any unique interference to KLRN-DT as D08. Similarly, and as documented by the attached Figures 6C and 6D, the proposed KLRN-DT as D08 facilities are not predicted to cause interference to the existing KJLF-LP operation; therefore, there is no impact predicted by OET-69 to KJLF-LP.

No Impact to Station KTOV-LP, N07, Corpus Christi, from KLRN-DT as D08

Station KTOV-LP, NTSC Channel 7, Corpus Christi, is authorized to transmit with a peak visual ERP of 100 watts using a directional antenna. Due to the 193.9-kilometer separation between the proposed KLRN-DT as D08 facilities and KTOV-LP, and as documented by the attached Figure 7, the KLRN-DT as D08 operation would not receive interference from, and would not cause interference to, KTOV-LP.

No Impact to Station KTMV-LP, N08, Corpus Christi, Texas, from KLRN-DT as D08

Station KTMV-LP, NTSC Channel 8, Corpus Christi, is authorized to transmit with a peak visual ERP of 200 watts using a directional antenna. As documented by the attached Figure 8, the KLRN-DT as D08 operation would not receive interference from, nor cause interference to, KTMV-LP.

Summary

The DTV Table of Allotments can be modified to substitute DTV Channel 8 for DTV Channel 20 at San Antonio, Texas, in addition to the proposed substitution of DTV Channel 8 for DTV Channel 47 at Corpus Christi, Texas. The proposed KLRN-DT as D08 facilities would completely cover San Antonio and would not cause more than 2% *de minimus* new interference to any other full-service NTSC or DTV station. This substitution would further have no impact to San Antonio LPTV Station KJLF-LP, operating on NTSC Channel 7, or to Corpus Christi LPTV Stations KTOV-LP or KTMV-LP, operating on NTSC Channels 7 and 8, respectively.

List of Figures

In carrying out these engineering studies, the following attached figures were prepared under my direct supervision:

1. Proposed azimuth pattern for KLRN-DT as D08
2. OET-69 interference study for KLRN-DT as D08
3. OET-69 interference study for KIII-DT as D08
4. OET-69 coverage study for KLRN-DT as D08
5. OET-69 coverage study for KIII-DT as D08
6. KJLF-LP OET-69 interference and coverage studies
7. KTOV-LP OET-69 interference and coverage studies
8. KTMV-LP OET-69 interference and coverage studies.

Dane E. Ericksen, P.E.

November 16, 1999

REGISTERED PROFESSIONAL ENGINEER
DANE E. ERICKSEN
No. 11654
Exp. 9-30-00
ELECTRICAL
STATE OF CALIFORNIA

Affidavit

State of California | ss:
County of Sonoma |

Dane E. Ericksen, being first duly sworn upon oath, deposes and says:

1. That he is a qualified Registered Professional Engineer, holds California Registration No. E-11654, which expires on September 30, 2000, and is employed by the firm of Hammett & Edison, Inc., Consulting Engineers, with offices located near the city of San Francisco, California,

2. That he graduated from California State University, Chico, in 1970, with a Bachelor of Science Degree in Electrical Engineering, was an employee of the Field Operations Bureau of the Federal Communications Commission from 1970 to 1982, with specialization in the areas of FM and television broadcast stations and cable television systems, and has been associated with the firm of Hammett & Edison, Inc., since October 1982,

3. That the firm of Hammett & Edison, Inc., Consulting Engineers, has been retained by the Alamo Public Telecommunications Council, licensee of TV Station KLRN, NTSC Channel 9, San Antonio, Texas, to prepare an engineering exhibit in support of a petition for rule making to amend the DTV Table of Allotments to substitute DTV Channel 8 for DTV Channel 20 at San Antonio, Texas,

4. That such engineering work has been carried out by him or under his direction and that the results thereof are attached hereto and form a part of this affidavit, and

5. That the foregoing statement and the report regarding the aforementioned engineering work are true and correct of his own knowledge except such statements made therein on information and belief and, as to such statements, he believes them to be true.

Dane E. Ericksen, P.E.

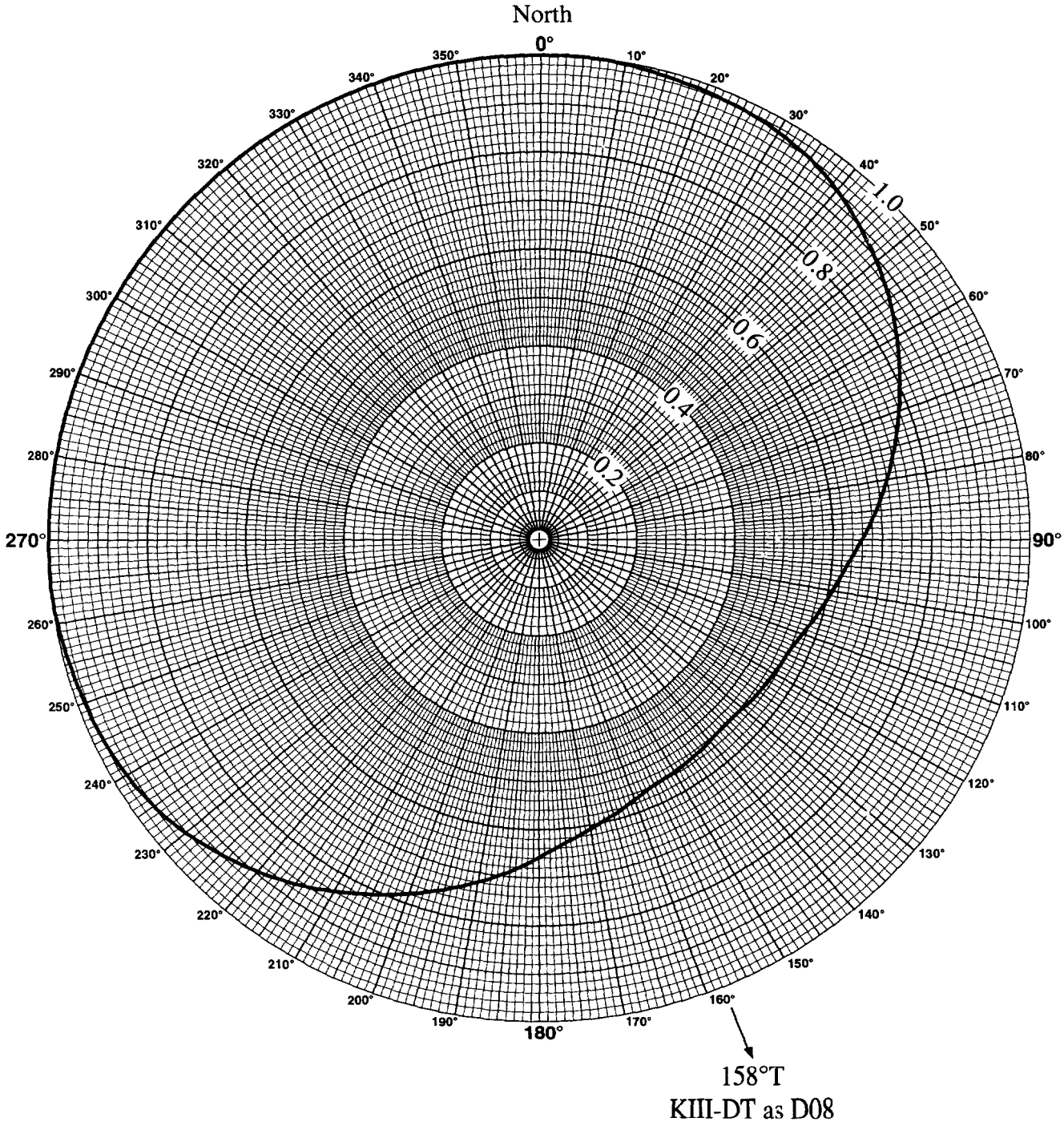
Subscribed and sworn to before me this 16th day of November, 1999

AMY L. MILLER
Commission # 1197811
Notary Public - California
Sonoma County
My Comm. Expires Oct 4, 2002

Amy L. Miller

Station KLRN-DT • as Channel 8 • San Antonio, Texas

Dielectric Type THV-6A8-R Azimuth Pattern at 315°T
- Relative Field -



HAMMETT & EDISON, INC.
CONSULTING ENGINEERS
SAN FRANCISCO

991120
Figure 1A

Station KLRN-DT • as Channel 8 • San Antonio, Texas

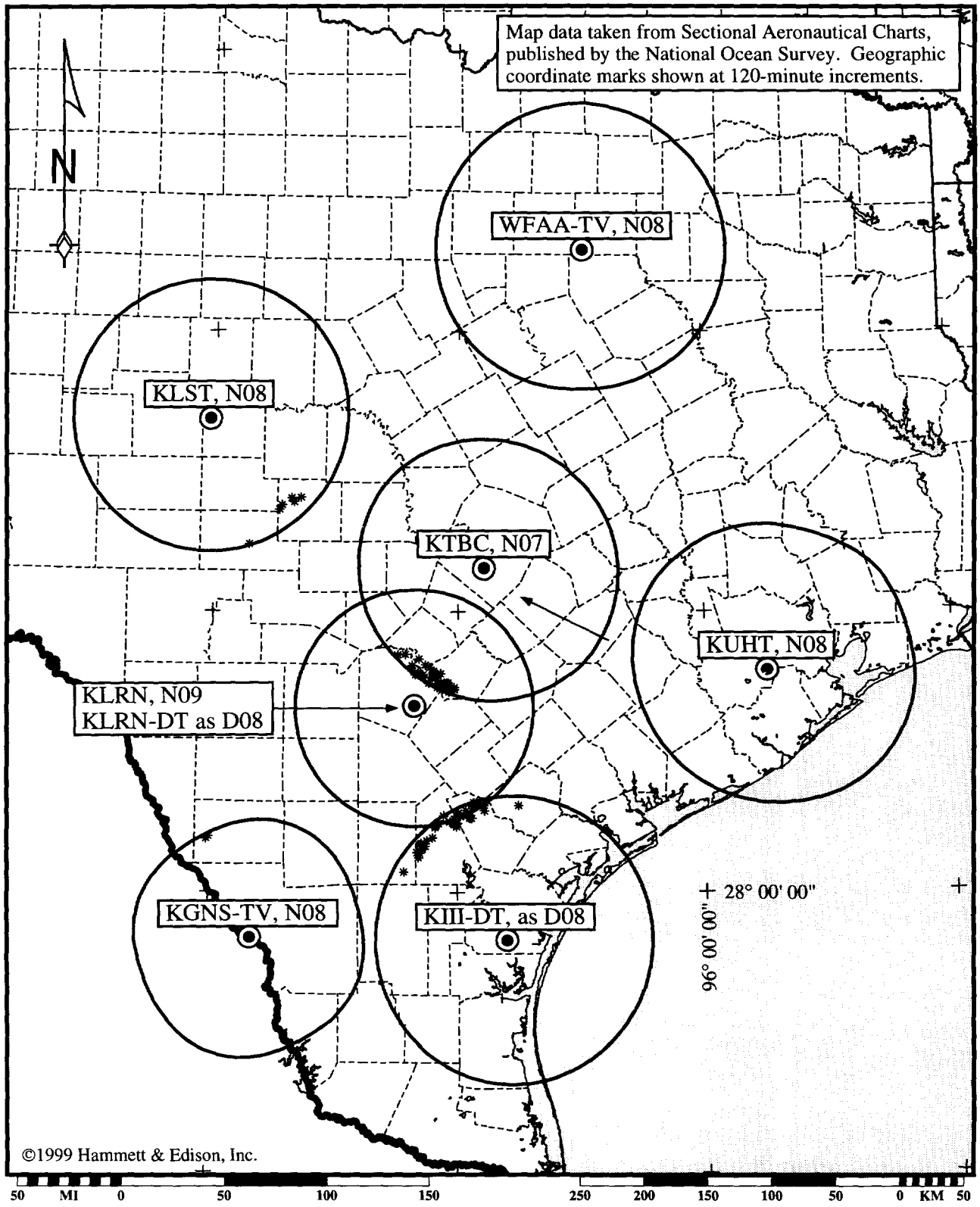
Normalized Dielectric THV-6A8-R Azimuth Pattern

Normalized Bearing	Relative Field
0°	1.000
10	1.000
20	1.000
30	1.000
40	1.000
50	1.000
60	0.99
70	0.98
80	0.96
90	0.92
100	0.87
110	0.81
120	0.75
130	0.69
140	0.63
150	0.59
160	0.56
170	0.55
180	0.54
190	0.55
200	0.56
210	0.59
220	0.63
230	0.69
240	0.75
250	0.81
260	0.87
270	0.92
280	0.96
290	0.98
300	0.99
310	1.000
320	1.000
330	1.000
340	1.000
350	1.000

Orientation of normalized pattern is 315°T

Station KLRN-DT • as Channel 8 • San Antonio, Texas

KLRN-DT as D08 (and KIII-DT as D08)
OET-69 Allocation Conditions



*= Interference (with population in cell)
●= Interference (without population in cell)

Contours are F(50,50) 56 dBu for NTSC stations, F(50,90) 36 dBu for DTV stations.

Station KLRN-DT • as Channel 8 • San Antonio, Texas

KLRN-DT as D08 (and KIII-DT as D08) OET-69 Interference Study

Interference analysis
tvixstudy 2.3.2

Before case parameters:
(same as "Original" below)

After case parameters:

	--Modified--	--Original--
Station:	D08 KLRNDT allot	D20 KLRNDT allot
City:	SAN ANTONIO, TX	SAN ANTONIO, TX
Coordinates:	N 29-19-38.0	N 29-19-33.0
	W 98-21-17.0	W 98-21-25.0
Height AMSL:	434.0 m	455.0 m
Maximum ERP:	8.30 kW	827 kW
Azimuth pattern:	THV-6A8-Raz.pat	DTV1471 (replication)
Orientation:	315.0	0.0
Elevation pattern:	OET-69 generic	OET-69 generic
Service level:	36.0 dBu	39.3 dBu

++Warning - some records had missing or bad data:

N09 XERV LIC Below-ground AGL height, adjusted to 2m AGL

			Before		After		
		BasePop	IX Change		IX Change		
Protected station		1000s	1000s	%Base	1000s	%Base	%Chng
N07 KTBC LIC	AUSTIN, TX	1,290	0	0.0	23	1.8	1.8
N08 WFAATV LIC	DALLAS, TX	4,210	0	0.0	0	0.0	0.0
N08 KUHT LIC	HOUSTON, TX	3,873	21	0.5	21	0.5	0.0
N08 KGNSTV LIC	LAREDO, TX	137	3	2.2	3	2.2	0.0
N08 KLST LIC	SAN ANGELO, TX	156	0	0.0	0	0.0	0.0
N09 KLRN LIC	SAN ANTONIO, TX	1,506	13	0.9	13	0.9	0.0
D08 KIIIDT allot*	CORPUS CHRISTI, TX	490	-5	-1.0	-3	-0.6	0.4

* Modified station parameters:

	--Modified--	--Original--
Station:	D08 KIIIDT allot	D47 KIIIDT allot
City:	CORPUS CHRISTI, TX	CORPUS CHRISTI, TX
Coordinates:	N 27-39-30.0	N 27-39-29.0
	W 97-36-04.0	W 97-36-04.0
Height AMSL:	302.0 m	275.0 m
Maximum ERP:	160 kW	1000 kW
Azimuth pattern:	THV-C135-8az.pat	DTV1393 (replication)
Orientation:	90.0	0.0
Elevation pattern:	OET-69 generic	OET-69 generic
Service level:	36.0 dBu	41.7 dBu

TVIXSTUDY™ Analysis Methodology

Implementation of FCC's Interference-Based Allocation Algorithm

On April 21, 1997, the Federal Communications Commission released its Fifth and Sixth Report and Order texts to Mass Media Docket No. 87-268, establishing a final Table of Allotments for the transition from analog NTSC television service to a digital television ("DTV") service. The Commission utilized a complex set of computerized analysis tools to generate the DTV allotment table and added FCC Rules Section 73.623(b)(2), requiring that similar tools be employed to analyze individual DTV station assignments with regard to their potential interference to other DTV stations, DTV allotments, and existing or authorized NTSC facilities. Those tools were described in FCC OET Bulletin No. 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference* ("OET-69"), released on July 2, 1997. Subsequent to OET-69, the Commission released, on February 23, 1998, its Memorandum Opinion and Order on Reconsideration of the Fifth [and Sixth] Report and Order[s], which made a number of changes to the previous allotment table and modified several of the analysis methods to be employed for studying DTV allotments and potential facility modifications. On August 10, 1998, the Commission published a text, *Additional Application Processing Guidelines for Digital Television (DTV)*, which provided important clarifications and enhancements to the specified analysis methods. Hammett & Edison has developed and refined the TVIXSTUDY computer software to perform FCC-style DTV allocation studies as based on OET-69, its subsequent clarifications, and also upon a detailed examination of the FCC allotment program software source code.

For most NTSC or DTV stations to be studied, the FCC analysis model first determines the location of the conventional F(50,50) Grade B contour of the NTSC station, or of the NTSC station associated with an assigned DTV station, using pattern information contained in the FCC engineering database and an assumed antenna elevation pattern. The model assumes that contour as an envelope, outside of which no protection from interference is implied or afforded. The location of the Grade B contour was used to determine the assigned power for the DTV station, once again using conventional methods found in FCC Rules Section 73.699, Figures 9 and 10, determining the power necessary on a radial basis to generate the associated DTV coverage contour (41 dBu for UHF, 36 dBu for high VHF Channels 7–13, and 28 dBu for low VHF Channels 2–6), for an assigned DTV channel. The maximum power determined using this method was assigned as the DTV operating power, provided it was calculated to be above established minimum power levels; otherwise, a minimum power level was assigned. By the same token, facilities with calculated DTV power levels above the established maximum power levels for a given channel were assigned the maximum power level. The use of this method usually creates a directional DTV antenna replication pattern, even for DTV assignments to presently omnidirectional NTSC TV stations. The FCC requires that a DTV facility employ an antenna design that meets the calculated replication envelope parameters, unless, with a few exceptions, zero or *de minimus* new interference to other facilities can be demonstrated.

In addition to the use of the Grade B envelope and an assumed directional transmitting antenna for all DTV facilities, the model assumes the use of directive receiving antennas at each studied location, or "cell." The characteristics of the receiving antennas are different, not only for the low

VHF, high VHF, and UHF frequency bands, but also for NTSC and DTV receiving situations; the FCC model specifies that more directive antennas be employed for analysis of DTV reception.

The FCC analysis technique employs terrain-sensitive calculation methods based on Version 1.2.2 of the ITS Irregular Terrain Model, also known as the Longley-Rice model. For each NTSC or DTV station to be studied, a grid of cells, two kilometers on a side, fills the associated Grade B or noise-limited contour. The program first determines which of the cells is predicted to receive service from the associated station, using Longley-Rice analysis with F(50,50) statistical weighting for NTSC and F(50,90) statistical weighting for DTV stations. Cells determined to have no service are not studied for interference from other stations.* Once cells having service are determined, the software analyzes potential interference from other NTSC or DTV stations, again using the Longley-Rice propagation algorithm and defined statistical weighting for all potential interfering signals. Each cell is evaluated, as appropriate, using the desired-to-undesired ratios and methods presented in FCC Rules Section 73.622, 73.623, and 74.706 for each channel relationship, and cells determined to have interference are flagged and excluded from further study, resulting in the generation of net interference-free coverage population totals.

The TVIXSTUDY analysis program employs all of the OET-69 analysis features described above, as well as several other more subtle elements prescribed by the FCC. Additionally, the program allows modeling of implementation scenarios that involve changes to effective radiated power, antenna height, antenna pattern, channel number, and/or transmitter location. TVIXSTUDY also can identify cells that fall in major bodies of water, as based on digitized map data, excluding them from the study. The program is primarily intended to study the effects of existing/potential NTSC or DTV facilities on other DTV or NTSC facilities, as based on desired-to-undesired ratio parameters defined in OET-69. A typical TVIXSTUDY analysis summary includes technical parameters of the proposed DTV or NTSC facility, along with its original (pre-modification) technical parameters, if any. Also included is a listing of each protected DTV and/or NTSC facility or allotment with associated interference-free population tabulations and the unique interference population resulting from operation of the proposed facility. TVIXSTUDY is similar to the program TVCOVSTUDY, which instead predicts the interference-limited coverage of a selected facility.

The results of the OET-69 algorithm are dependent on the use of computer databases, including terrain, population, and FCC engineering records. FCC Rules §0.434(e) specifically disclaims the accuracy of its databases, recommending the use of primary data sources (*i.e.*, paper documents), which is not practical for DTV interference analyses. Further, while Hammett & Edison, Inc. endeavors to follow official releases and established precedents on the matter, FCC policy on DTV analysis methods is constantly changing. Thus, the results of OET-69 interference and coverage studies are subject to change and may differ from FCC results.

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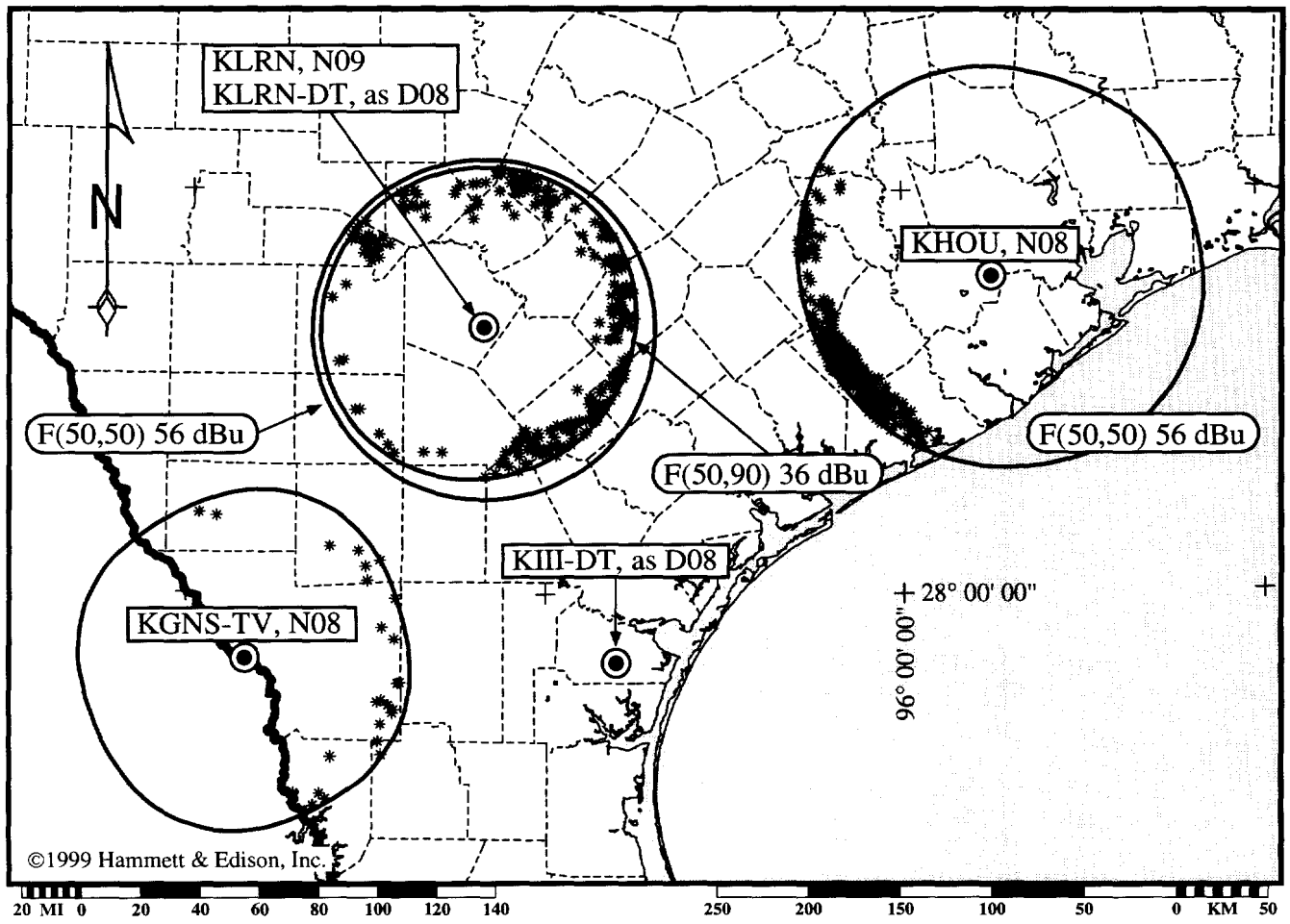
* It is noted that the Longley-Rice model is not always capable of determining, within certain confidence limits, whether a particular cell has service. In such cases, the Longley-Rice algorithm returns an error code; the FCC method for handling such error codes is to assume that the associated cells have interference-free service and, as such, are not further considered. The Hammett & Edison TVIXSTUDY program reports the number of such error cells for a given study and provides the option of generating a map showing their locations, which may be useful for further review using other propagation analysis tools.

Station KLRN-DT • as Channel 8 • San Antonio, Texas

KIII-DT as D08 (and KLRN-DT as D08)
OET-69 Allocation Conditions



*= Interference (with population in cell)
●= Interference (without population in cell)

Map data taken from Sectional Aeronautical Charts, published by the National Ocean Survey. Geographic coordinate marks shown at 120-minute increments.

Station KLRN-DT • as Channel 8 • San Antonio, Texas

KIII-DT as D08 (and KLRN-DT as D08) OET-69 Interference Study

Interference analysis
tvixstudy 2.3.2

Before case parameters:
(same as "Original" below)

After case parameters:

	--Modified--	--Original--
Station:	D08 KIIIDT allot	D47 KIIIDT allot
City:	CORPUS CHRISTI, TX	CORPUS CHRISTI, TX
Coordinates:	N 27-39-30.0	N 27-39-29.0
	W 97-36-04.0	W 97-36-04.0
Height AMSL:	302.0 m	275.0 m
Maximum ERP:	160 kW	1000 kW
Azimuth pattern:	THV-C135-8az.pat	DTV1393 (replication)
Orientation:	90.0	0.0
Elevation pattern:	OET-69 generic	OET-69 generic
Service level:	36.0 dBu	41.7 dBu

++Warning - some records had missing or bad data:

N09 XERV LIC Below-ground AGL height, adjusted to 2m AGL

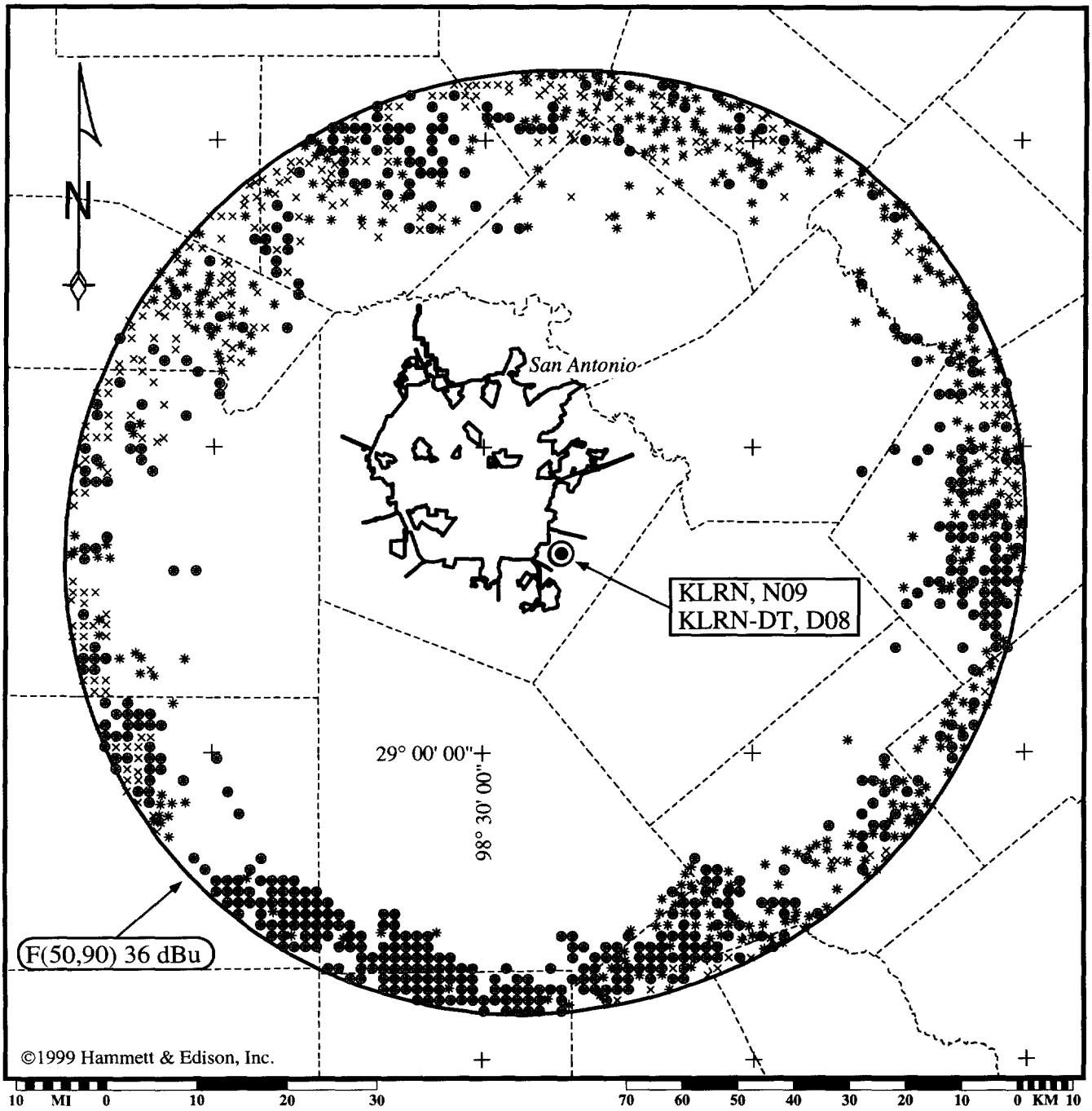
			Before		After		
		BasePop	IX Change		IX Change		
Protected station		1000s	1000s	%Base	1000s	%Base	%Chng
N08 KUHT LIC	HOUSTON, TX	3,873	0	0.0	21	0.5	0.5
N08 KGNSTV LIC	LAREDO, TX	137	2	1.5	3	2.2	0.7
N09 KLRN LIC	SAN ANTONIO, TX	1,506	13	0.9	13	0.9	0.0
D08 KLRNDT allot*	SAN ANTONIO, TX	1,510	43	2.8	53	3.5	0.7

* Modified station parameters:

	--Modified--	--Original--
Station:	D08 KLRNDT allot	D20 KLRNDT allot
City:	SAN ANTONIO, TX	SAN ANTONIO, TX
Coordinates:	N 29-19-38.0	N 29-19-33.0
	W 98-21-17.0	W 98-21-25.0
Height AMSL:	434.0 m	455.0 m
Maximum ERP:	8.30 kW	827 kW
Azimuth pattern:	THV-6A8-Raz.pat	DTV1471 (replication)
Orientation:	315.0	0.0
Elevation pattern:	OET-69 generic	OET-69 generic
Service level:	36.0 dBu	39.3 dBu

Station KLRN-DT • as Channel 8 • San Antonio, Texas

KLRN-DT as D08 (and KIII-DT as D08)
OET-69 Coverage Map



×= No Signal (below threshold)
*= Interference (with population in cell)
⊛= Interference (without population in cell)

Map data taken from Sectional Aeronautical Charts, published by the National Ocean Survey. City limits shown taken from 1995 U.S. Census Bureau TIGER data. Geographic coordinate marks shown at 30-minute increments.

Station KLRN-DT • as Channel 8 • San Antonio, Texas

KLRN-DT as D08 (and KIII-DT as D08) OET-69 Coverage Study

Coverage analysis
tvcovstudy 2.3.2

Station parameters:

	--Modified--	--Original--
Station:	D08 KLRNDT allot	D20 KLRNDT allot
City:	SAN ANTONIO, TX	SAN ANTONIO, TX
Coordinates:	N 29-19-38.0	N 29-19-33.0
	W 98-21-17.0	W 98-21-25.0
Height AMSL:	434.0 m	455.0 m
Maximum ERP:	8.30 kW	827 kW
Azimuth pattern:	THV-6A8-Raz.pat	DTV1471 (replication)
Orientation:	315.0	0.0
Elevation pattern:	OET-69 generic	OET-69 generic
Service level:	36.0 dBu	39.3 dBu

		Total IX		Unique IX	
Interfering station		Area,km2	Population	Area,km2	Population
N07 KTBC LIC	AUSTIN, TX	28.0	1,012	4.0	9
N08 WFAATV LIC	DALLAS, TX	12.0	188	0.0	0
N08 KUHT LIC	HOUSTON, TX	395.7	4,771	0.0	0
N08 KGNSTV LIC	LAREDO, TX	907.3	9,975	75.9	642
N08 KLST LIC	SAN ANGELO, TX	459.7	8,080	28.0	128
N09 KLRN LIC	SAN ANTONIO, TX	0.0	0	0.0	0
D08 KIIIDT allot*	CORPUS CHRISTI, TX	3297.5	22,101	2314.2	10,045

Service conditions	Area,km2	Population
Noise-limited service	23302.3	1,491,067
Terrain-limited service	22267.1	1,480,644
Interference-free service	18793.7	1,456,522
Longley-Rice errors	5763.6	327,894

* Modified station parameters:

	--Modified--	--Original--
Station:	D08 KIIIDT allot	D47 KIIIDT allot
City:	CORPUS CHRISTI, TX	CORPUS CHRISTI, TX
Coordinates:	N 27-39-30.0	N 27-39-29.0
	W 97-36-04.0	W 97-36-04.0
Height AMSL:	302.0 m	275.0 m
Maximum ERP:	160 kW	1000 kW
Azimuth pattern:	THV-C135-8az.pat	DTV1393 (replication)
Orientation:	90.0	0.0
Elevation pattern:	OET-69 generic	OET-69 generic
Service level:	36.0 dBu	41.7 dBu

TVCOVSTUDY™ Analysis Methodology

Implementation of FCC's Interference-Based Algorithm to Predict Coverage

On April 21, 1997, the Federal Communications Commission released its Fifth and Sixth Report and Order texts to Mass Media Docket No. 87-268, establishing a final Table of Allotments for the transition from analog NTSC television service to a digital television ("DTV") service. The Commission utilized a complex set of computerized analysis tools to generate the DTV allotment table and added FCC Rules Section 73.623(b)(2), requiring that similar tools be employed to analyze individual DTV station assignments with regard to their potential interference to other DTV stations, DTV allotments, and existing or authorized NTSC facilities. Those tools were described in FCC OET Bulletin No. 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference* ("OET-69"), released on July 2, 1997. Subsequent to OET-69, the Commission released, on February 23, 1998, its Memorandum Opinion and Order on Reconsideration of the Fifth [and Sixth] Report and Order[s], which made a number of changes to the previous allotment table and modified several of the analysis methods to be employed for studying DTV allotments and potential facility modifications. On August 10, 1998, the Commission published a text, *Additional Application Processing Guidelines for Digital Television (DTV)*, which provided important clarifications and enhancements to the specified analysis methods. Hammett & Edison has developed and refined the TVCOVSTUDY computer software to perform FCC-style DTV coverage studies as based on OET-69, its subsequent clarifications, and also upon a detailed examination of the FCC allotment program software source code.

For most NTSC or DTV stations to be studied, the FCC analysis model first determines the location of the conventional F(50,50) Grade B contour of the NTSC station, or of the NTSC station associated with an assigned DTV station, using pattern information contained in the FCC engineering database and an assumed antenna elevation pattern. The model assumes that contour as an envelope, outside of which no protection from interference is implied or afforded. The location of the Grade B contour was used to determine the assigned power for the DTV station, once again using conventional methods found in FCC Rules Section 73.699, Figures 9 and 10, determining the power necessary on a radial basis to generate the associated DTV coverage contour (41 dBu for UHF, 36 dBu for high VHF Channels 7–13, and 28 dBu for low VHF Channels 2–6), for an assigned DTV channel. The maximum power determined using this method was assigned as the DTV operating power, provided it was calculated to be above established minimum power levels; otherwise, a minimum power level was assigned. By the same token, facilities with calculated DTV power levels above the established maximum power levels for a given channel were assigned the maximum power level. The use of this method usually creates a directional DTV antenna replication pattern, even for DTV assignments to presently omnidirectional NTSC TV stations. The FCC requires that a DTV facility employ an antenna design that meets the calculated replication envelope parameters, unless, with a few exceptions, zero or *de minimus* new interference to other facilities can be demonstrated.

In addition to the use of the Grade B envelope and an assumed directional transmitting antenna for all DTV facilities, the model assumes the use of directive receiving antennas at each studied location, or "cell." The characteristics of the receiving antennas are different, not only for the low

VHF, high VHF, and UHF frequency bands, but also for NTSC and DTV receiving situations; the FCC model specifies that more directive antennas be employed for analysis of DTV reception.

The FCC analysis technique employs terrain-sensitive calculation methods based on Version 1.2.2 of the ITS Irregular Terrain Model, also known as the Longley-Rice model. For each NTSC or DTV station to be studied, a grid of cells, two kilometers on a side, fills the associated Grade B or noise-limited contour. The program first determines which of the cells is predicted to receive service from the associated station, using Longley-Rice analysis with F(50,50) statistical weighting for NTSC and F(50,90) statistical weighting for DTV stations. Cells determined to have no service are not studied for interference from other stations.* Once cells having service are determined, the software analyzes potential interference from other NTSC or DTV stations, again using the Longley-Rice propagation algorithm and defined statistical weighting for all potential interfering signals. Each cell is evaluated, as appropriate, using the desired-to-undesired ratios and methods presented in FCC Rules Section 73.622, 73.623, and 74.706 for each channel relationship, and cells determined to have interference are flagged and excluded from further study, resulting in the generation of net interference-free coverage population totals.

The TVCOVSTUDY analysis program employs all of the OET-69 analysis features described above, as well as several other more subtle elements prescribed by the FCC. Additionally, the program allows modeling of implementation scenarios that involve changes to effective radiated power, antenna height, antenna pattern, channel number, and/or transmitter location. TVCOVSTUDY also can identify cells that fall in major bodies of water, as based on digitized map data, excluding them from the study. The program is primarily intended to study coverage of DTV or NTSC facilities, as based on desired-to-undesired ratio parameters defined in OET-69. A typical TVCOVSTUDY analysis summary includes technical parameters of the proposed DTV or NTSC facility, along with a listing of each interfering DTV and/or NTSC facility or allotment with associated interference population and area tabulations within the protected area of the proposed facility. TVCOVSTUDY is similar to the program TVIXSTUDY, which instead predicts the interference effects on other stations by a proposed facility.

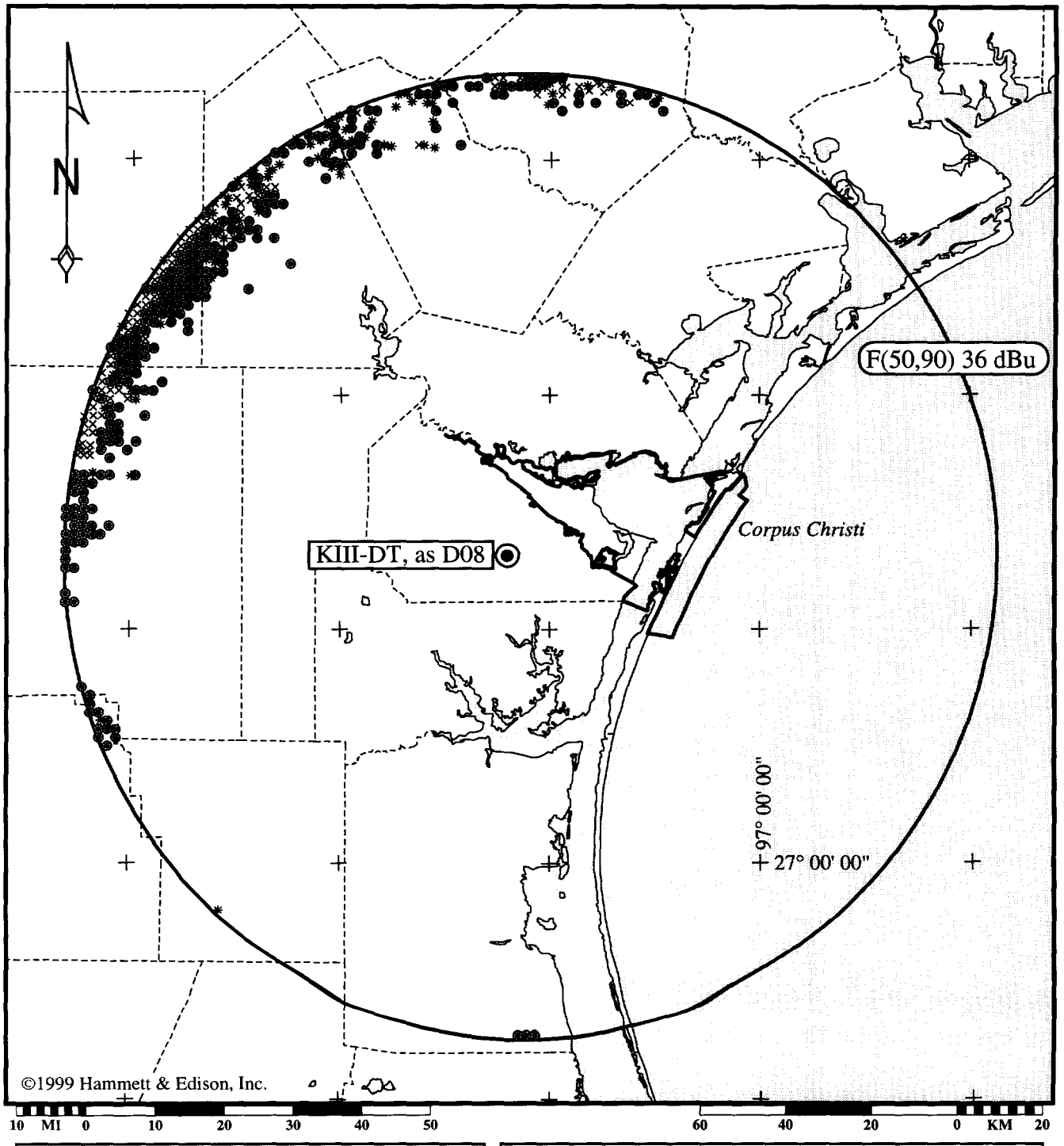
The results of the OET-69 algorithm are dependent on the use of computer databases, including terrain, population, and FCC engineering records. FCC Rules §0.434(e) specifically disclaims the accuracy of its databases, recommending the use of primary data sources (*i.e.*, paper documents), which is not practical for DTV interference analyses. Further, while Hammett & Edison, Inc. endeavors to follow official releases and established precedents on the matter, FCC policy on DTV analysis methods is constantly changing. Thus, the results of OET-69 interference and coverage studies are subject to change and may differ from FCC results.

---

* It is noted that the Longley-Rice model is not always capable of determining, within certain confidence limits, whether a particular cell has service. In such cases, the Longley-Rice algorithm returns an error code; the FCC method for handling such error codes is to assume that the associated cells have interference-free service and, as such, are not further considered. The Hammett & Edison TVIXSTUDY program reports the number of such error cells for a given study and provides the option of generating a map showing their locations, which may be useful for further review using other propagation analysis tools.

Station KLRN-DT • as Channel 8 • San Antonio, Texas

KIII-DT as D08 (and KLRN-DT as D08)
OET-69 Coverage Map



×= No Signal (below threshold)
✱= Interference (with population in cell)
●= Interference (without population in cell)

Map data taken from Sectional Aeronautical Charts, published by the National Ocean Survey. City limits shown taken from 1995 U.S. Census Bureau TIGER data. Geographic coordinate marks shown at 30-minute increments.

Station KLRN-DT • as Channel 8 • San Antonio, Texas

KIIIDT as D08 (and KLRN-DT as D08) OET-69 Coverage Study

Coverage analysis
tvcovstudy 2.3.2

Station parameters:

	--Modified--	--Original--
Station:	D08 KIIIDT allot	D47 KIIIDT allot
City:	CORPUS CHRISTI, TX	CORPUS CHRISTI, TX
Coordinates:	N 27-39-30.0	N 27-39-29.0
	W 97-36-04.0	W 97-36-04.0
Height AMSL:	302.0 m	275.0 m
Maximum ERP:	160 kW	1000 kW
Azimuth pattern:	THV-C135-8az.pat	DTV1393 (replication)
Orientation:	90.0	0.0
Elevation pattern:	OET-69 generic	OET-69 generic
Service level:	36.0 dBu	41.7 dBu

++Warning - some records had missing or bad data:

N09 XERV LIC Below-ground AGL height, adjusted to 2m AGL

		Total IX		Unique IX	
Interfering station		Area,km2	Population	Area,km2	Population
N08 KUHT LIC	HOUSTON, TX	128.2	565	12.0	0
N08 KGNSTV LIC	LAREDO, TX	753.2	1,220	336.5	164
N09 KLRN LIC	SAN ANTONIO, TX	0.0	0	0.0	0
N09 XERV LIC	REYNOSA, TA	0.0	0	0.0	0
D08 KLRNDT allot*	SAN ANTONIO, TX	881.4	3,640	492.8	2,597

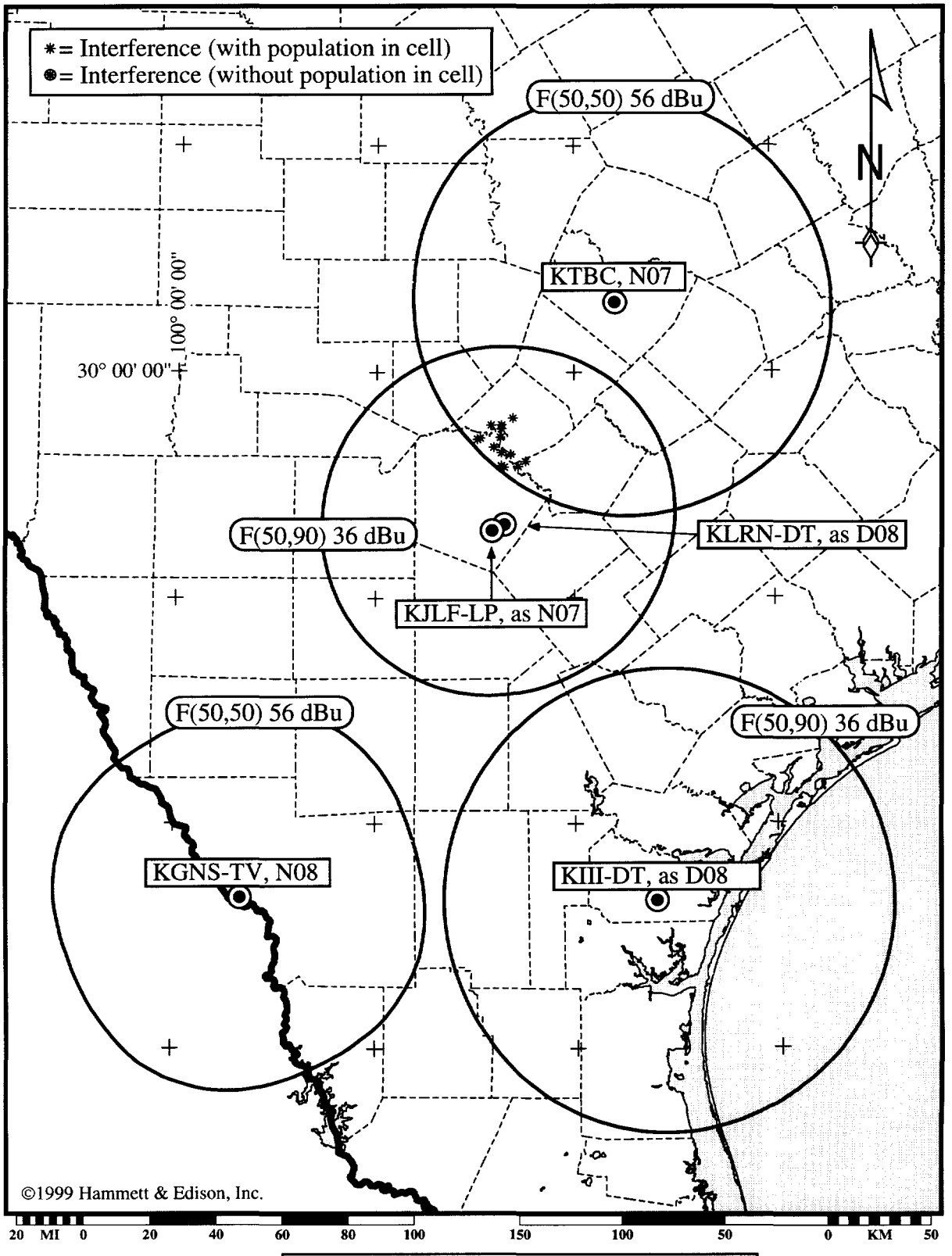
Service conditions	Area,km2	Population
Noise-limited service	26458.9	500,640
Terrain-limited service	26146.4	496,421
Interference-free service	24888.3	492,604
Longley-Rice errors	1298.1	3,796

* Modified station parameters:

	--Modified--	--Original--
Station:	D08 KLRNDT allot	D20 KLRNDT allot
City:	SAN ANTONIO, TX	SAN ANTONIO, TX
Coordinates:	N 29-19-38.0	N 29-19-33.0
	W 98-21-17.0	W 98-21-25.0
Height AMSL:	434.0 m	455.0 m
Maximum ERP:	8.30 kW	827 kW
Azimuth pattern:	THV-6A8-Raz.pat	DTV1471 (replication)
Orientation:	315.0	0.0
Elevation pattern:	OET-69 generic	OET-69 generic
Service level:	36.0 dBu	39.3 dBu

Station KLRN-DT • as Channel 8 • San Antonio, Texas

KJLF-LP, N07, San Antonio, OET-69 Interference Study (with KLRN-DT as D08 and KIII-DT as D08)



Map data taken from Sectional Aeronautical Charts, published by the National Ocean Survey. Geographic coordinate marks shown at 60-minute increments.

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991120
Figure 6A

Station KLRN-DT • as Channel 8 • San Antonio, Texas

Station KJLF-LP, N07, San Antonio, OET-69 Interference Study (with KLRN-DT as D08 and KIII-DT as D08)

```
Interference analysis
tvixstudy 2.3.2

Station parameters:
          Station: N07 KJLF-LP LIC
             City: SAN ANTONIO, TX
      Coordinates: N  29-18-04.0
                   W  98-24-59.0
      Height AMSL:  221.0 m
      Maximum ERP: 0.122 kW
  Azimuth pattern: SCA-ODD971210JE
      Orientation:   0.0
Elevation pattern: OET-69 generic
    Service level: 68.0 dBu

++Warning - some records had missing or bad data:

N09 XERV LIC     Below-ground AGL height, adjusted to 2m AGL
```

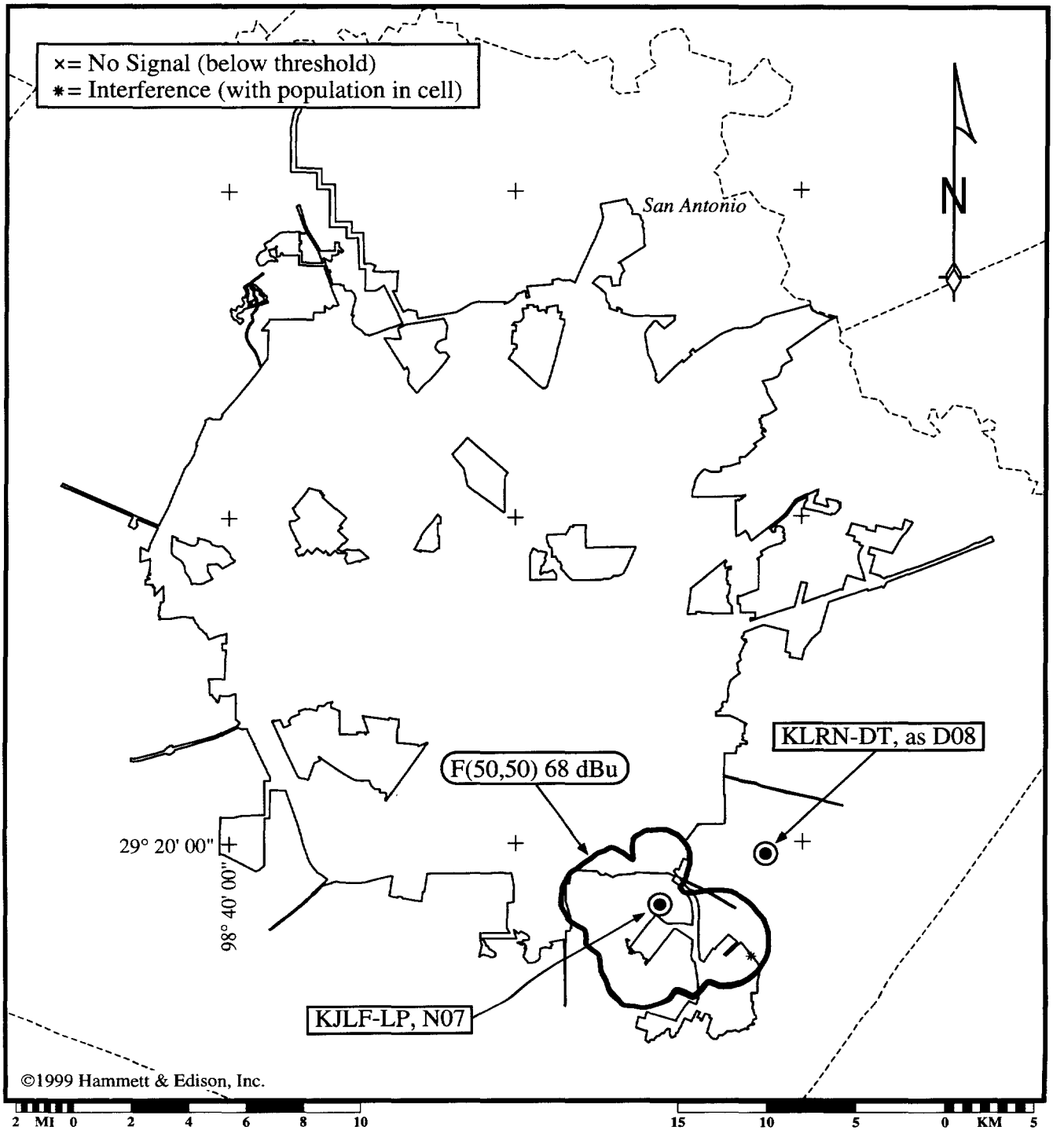
Protected station		Base Pop	IX Change	%Base	Unique IX
N07 KTBC LIC	AUSTIN, TX	1,290,018	1,242	0.1	8,886
N08 KGNSTV LIC	LAREDO, TX	137,032	2,716	2.0	0
D08 KIIIDT allot*	CORPUS CHRISTI, TX	490,000	-2,604	-0.5	0
D08 KLRNDT allot*	SAN ANTONIO, TX	1,510,000	53,478	3.5	0

```
* Modified station parameters:
                   --Modified---------------  --Original---------------
          Station: D08 KIIIDT allot           D47 KIIIDT allot
             City: CORPUS CHRISTI, TX         CORPUS CHRISTI, TX
      Coordinates: N  27-39-30.0              N  27-39-29.0
                   W  97-36-04.0              W  97-36-04.0
      Height AMSL:  302.0 m                    275.0 m
      Maximum ERP:   160 kW                    1000 kW
  Azimuth pattern: THV-C135-8az.pat           DTV1393 (replication)
      Orientation:  90.0                       0.0
Elevation pattern: OET-69 generic             OET-69 generic
    Service level: 36.0 dBu                   41.7 dBu

* Modified station parameters:
                   --Modified---------------  --Original---------------
          Station: D08 KLRNDT allot           D20 KLRNDT allot
             City: SAN ANTONIO, TX            SAN ANTONIO, TX
      Coordinates: N  29-19-38.0              N  29-19-33.0
                   W  98-21-17.0              W  98-21-25.0
      Height AMSL:  434.0 m                    455.0 m
      Maximum ERP:  8.30 kW                    827 kW
  Azimuth pattern: THV-6A8-Raz.pat            DTV1471 (replication)
      Orientation: 315.0                       0.0
Elevation pattern: OET-69 generic             OET-69 generic
    Service level: 36.0 dBu                   39.3 dBu
```

Station KLRN-DT • as Channel 8 • San Antonio, Texas

OET-69 Coverage Study for Station KJLF-LP, N07, San Antonio with KLRN-DT as D08 and with KIII-DT as D08



Map data taken from Sectional Aeronautical Charts, published by the National Ocean Survey. City limits shown taken from 1995 U.S. Census Bureau TIGER data. Geographic coordinate marks shown at 10-minute increments.

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Figure 6C

Station KLRN-DT • as Channel 8 • San Antonio, Texas

Station KJLF-LP, N07, San Antonio, OET-69 Coverage Study (with KLRN-DT as D08 and KIII-DT as D08)

Coverage analysis
tvcovstudy 2.3.2

Station parameters:

Station:	N07 KJLF-LP LIC
City:	SAN ANTONIO, TX
Coordinates:	N 29-18-04.0
	W 98-24-59.0
Height AMSL:	221.0 m
Maximum ERP:	0.122 kW
Azimuth pattern:	SCA-ODD971210JE
Orientation:	0.0
Elevation pattern:	OET-69 generic
Service level:	68.0 dBu

		Total IX		Unique IX	
Interfering station		Area,km2	Population	Area,km2	Population
N07 KTBC LIC	AUSTIN, TX	4.0	32	4.0	32
D08 KLRNDT allot*	SAN ANTONIO, TX	0.0	0	0.0	0

Service conditions	Area,km2	Population
Noise-limited service	72.0	3,677
Terrain-limited service	72.0	3,677
Interference-free service	68.0	3,645
Longley-Rice errors	4.0	89

Modified station parameters:

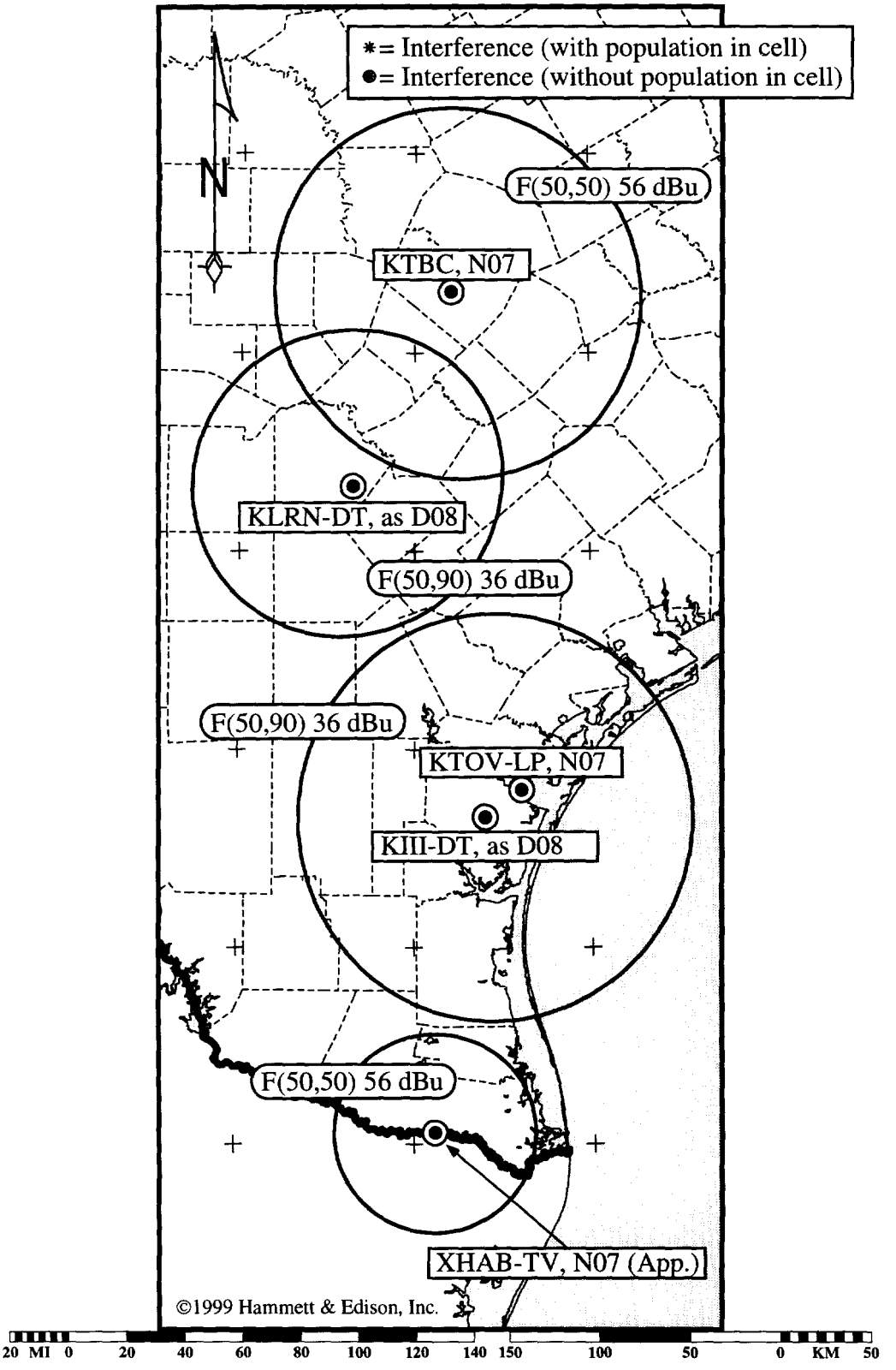
	--Modified--	--Original--
Station:	D08 KIIIDT allot	D47 KIIIDT allot
City:	CORPUS CHRISTI, TX	CORPUS CHRISTI, TX
Coordinates:	N 27-39-30.0	N 27-39-29.0
	W 97-36-04.0	W 97-36-04.0
Height AMSL:	302.0 m	275.0 m
Maximum ERP:	160 kW	1000 kW
Azimuth pattern:	THV-C135-8az.pat	DTV1393 (replication)
Orientation:	90.0	0.0
Elevation pattern:	OET-69 generic	OET-69 generic
Service level:	36.0 dBu	41.7 dBu

* Modified station parameters:

	--Modified--	--Original--
Station:	D08 KLRNDT allot	D20 KLRNDT allot
City:	SAN ANTONIO, TX	SAN ANTONIO, TX
Coordinates:	N 29-19-38.0	N 29-19-33.0
	W 98-21-17.0	W 98-21-25.0
Height AMSL:	434.0 m	455.0 m
Maximum ERP:	8.30 kW	827 kW
Azimuth pattern:	THV-6A8-Raz.pat	DTV1471 (replication)
Orientation:	315.0	0.0
Elevation pattern:	OET-69 generic	OET-69 generic
Service level:	36.0 dBu	39.3 dBu

Station KLRN-DT • as Channel 8 • San Antonio, Texas

KTOV-LP, N07, Corpus Christi, OET-69 Interference Study (with KLRN-DT as D08 and KIII-DT as D08)



Map data taken from Sectional Aeronautical Charts, published by the National Ocean Survey. Geographic coordinate marks shown at 60-minute increments.

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Figure 7A

Station KLRN-DT • as Channel 8 • San Antonio, Texas

Station KTOV-LP, N07, San Antonio, OET-69 Interference Study (with KLRN-DT as D08 and KIII-DT as D08)

```
Interference analysis
tvixstudy 2.3.2

Station parameters:
          Station: N07 KTOV-LP LIC
             City: CORPUS CHRISTI, TX
      Coordinates: N  27-47-46.0
                   W  97-23-47.0
      Height AMSL:  102.0 m
      Maximum ERP: 0.100 kW
  Azimuth pattern: SCA-HDCA-10-7
      Orientation: 150.0
Elevation pattern: OET-69 generic
    Service level: 68.0 dBu

++Warning - some records had missing or bad data:

N07 XHABTV APP   Below-ground AGL height, adjusted to 2m AGL
N07 XHAD LIC     Below-ground AGL height, adjusted to 2m AGL
                 Missing or bad azimuth pattern data, substituted omni
N09 XERV LIC     Below-ground AGL height, adjusted to 2m AGL
```

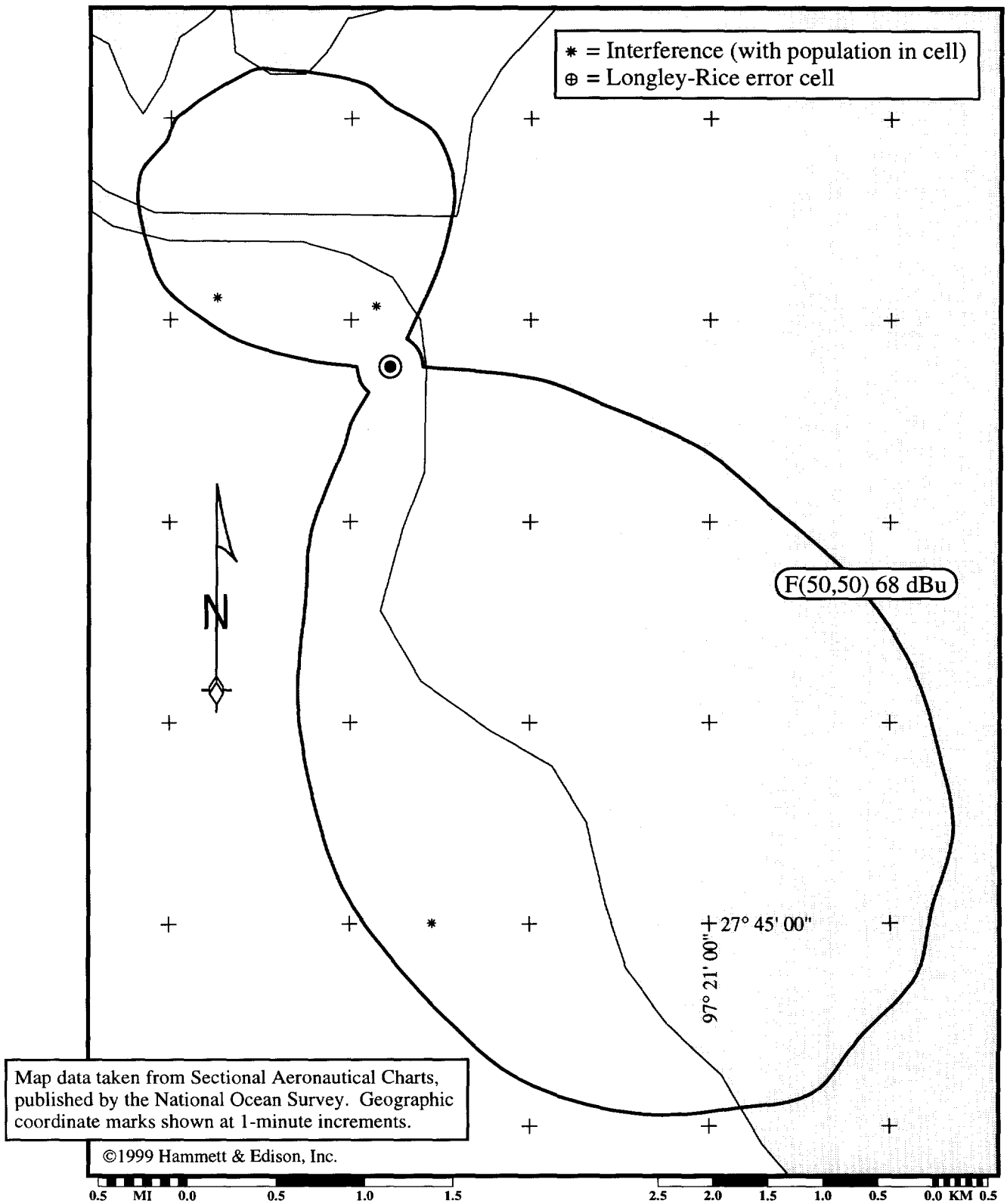
Protected station		Base Pop	IX Change	%Base	Unique IX
N07 KTBC LIC	AUSTIN, TX	1,290,018	22,608	1.8	0
N07 XHABTV APP	MATAMOROS, TA	0	0	NaN	0
D08 KIIIDT allot*	CORPUS CHRISTI, TX	490,000	-2,604	-0.5	0
D08 KLRNDT allot*	SAN ANTONIO, TX	1,510,000	53,478	3.5	0

```
* Modified station parameters:
                   --Modified---------------  --Original---------------
          Station: D08 KIIIDT allot           D47 KIIIDT allot
             City: CORPUS CHRISTI, TX         CORPUS CHRISTI, TX
      Coordinates: N  27-39-30.0              N  27-39-29.0
                   W  97-36-04.0              W  97-36-04.0
      Height AMSL:  302.0 m                    275.0 m
      Maximum ERP:   160 kW                    1000 kW
  Azimuth pattern: THV-C135-8az.pat           DTV1393 (replication)
      Orientation:  90.0                       0.0
Elevation pattern: OET-69 generic             OET-69 generic
    Service level: 36.0 dBu                   41.7 dBu

* Modified station parameters:
                   --Modified---------------  --Original---------------
          Station: D08 KLRNDT allot           D20 KLRNDT allot
             City: SAN ANTONIO, TX            SAN ANTONIO, TX
      Coordinates: N  29-19-38.0              N  29-19-33.0
                   W  98-21-17.0              W  98-21-25.0
      Height AMSL:  434.0 m                    455.0 m
      Maximum ERP:  8.30 kW                    827 kW
  Azimuth pattern: THV-6A8-Raz.pat            DTV1471 (replication)
      Orientation: 315.0                       0.0
Elevation pattern: OET-69 generic             OET-69 generic
    Service level: 36.0 dBu                   39.3 dBu
```

Station KLRN-DT • as Channel 8 • San Antonio, Texas

OET-69 Coverage Study for Station KTOV-LP, N07, Corpus Christi with KLRN-DT as D08 and KIII-DT as D08



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991120
Figure 7C

Station KLRN-DT • as Channel 8 • San Antonio, Texas

Station KTOV-LP, N07, San Antonio, OET-69 Coverage Study (with KLRN-DT as D08 and KIII-DT as D08)

Coverage analysis
tvcovstudy 2.3.2

Station parameters:

Station:	N07 KTOV-LP LIC
City:	CORPUS CHRISTI, TX
Coordinates:	N 27-47-46.0
	W 97-23-47.0
Height AMSL:	102.0 m
Maximum ERP:	0.100 kW
Azimuth pattern:	SCA-HDCA-10-7
Orientation:	150.0
Elevation pattern:	OET-69 generic
Service level:	68.0 dBu

		Total IX		Unique IX	
Interfering station		Area,km2	Population	Area,km2	Population
N07 KTBC LIC	AUSTIN, TX	0.0	0	0.0	0
D08 KIIIDT allot*	CORPUS CHRISTI, TX	12.0	13,663	12.0	13,663

Service conditions	Area,km2	Population
Noise-limited service	24.0	24,325
Terrain-limited service	24.0	24,325
Interference-free service	12.0	10,662
Longley-Rice errors	0.0	0

* Modified station parameters:

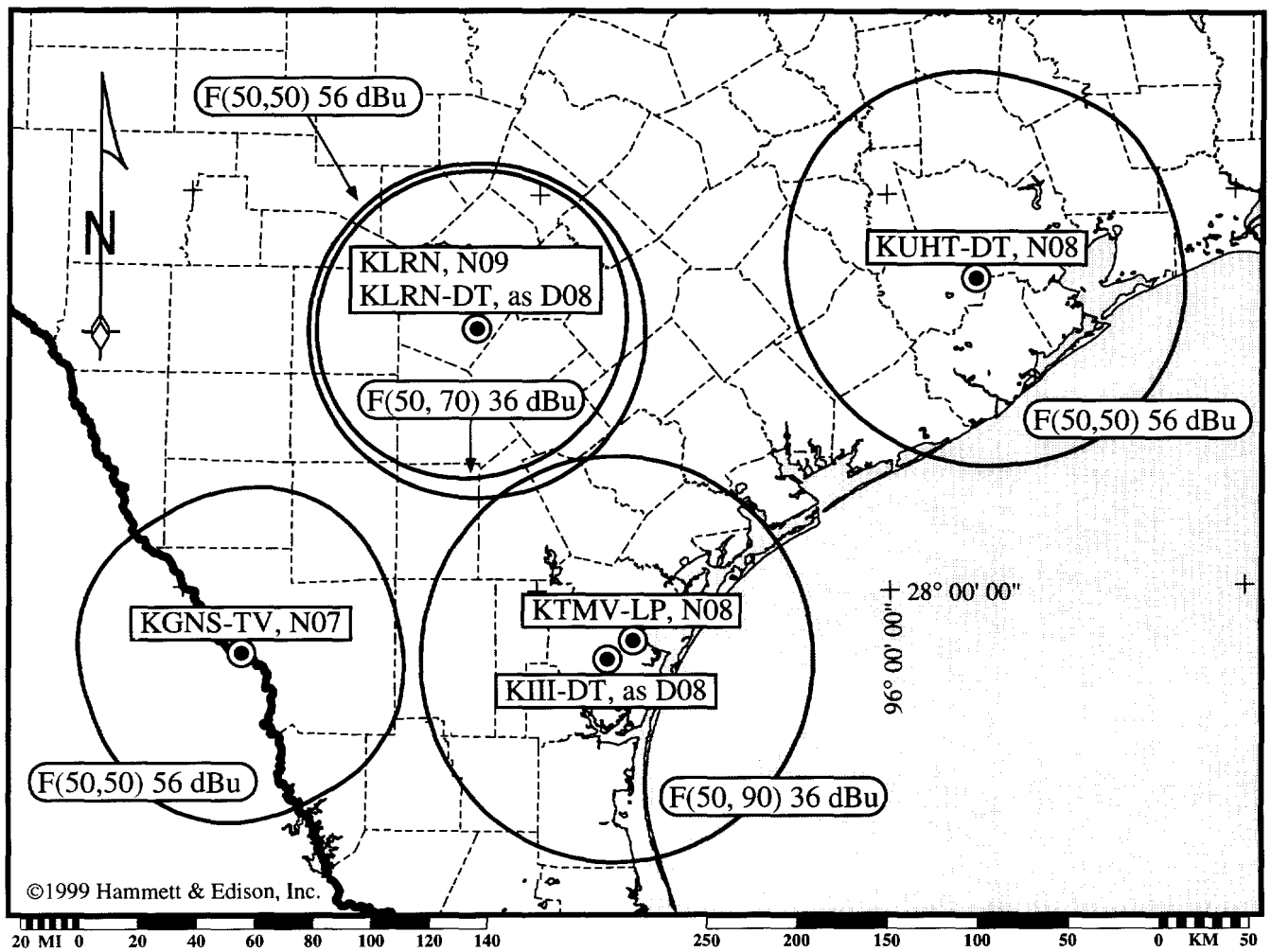
	--Modified--	--Original--
Station:	D08 KIIIDT allot	D47 KIIIDT allot
City:	CORPUS CHRISTI, TX	CORPUS CHRISTI, TX
Coordinates:	N 27-39-30.0	N 27-39-29.0
	W 97-36-04.0	W 97-36-04.0
Height AMSL:	302.0 m	275.0 m
Maximum ERP:	160 kW	1000 kW
Azimuth pattern:	THV-C135-8az.pat	DTV1393 (replication)
Orientation:	90.0	0.0
Elevation pattern:	OET-69 generic	OET-69 generic
Service level:	36.0 dBu	41.7 dBu

Modified station parameters:

	--Modified--	--Original--
Station:	D08 KLRNDT allot	D20 KLRNDT allot
City:	SAN ANTONIO, TX	SAN ANTONIO, TX
Coordinates:	N 29-19-38.0	N 29-19-33.0
	W 98-21-17.0	W 98-21-25.0
Height AMSL:	434.0 m	455.0 m
Maximum ERP:	8.30 kW	827 kW
Azimuth pattern:	THV-6A8-Raz.pat	DTV1471 (replication)
Orientation:	315.0	0.0
Elevation pattern:	OET-69 generic	OET-69 generic
Service level:	36.0 dBu	39.3 dBu

Station KLRN-DT • as Channel 8 • San Antonio, Texas

KTMV-LP, N08, Corpus Christi, OET-69 Interference Study (with KLRN-DT as D08 and KIII-DT as D08)



* = Interference (with population in cell)
⊕ = Longley-Rice error cell

Map data taken from Sectional Aeronautical Charts, published by the National Ocean Survey. Geographic coordinate marks shown at 120-minute increments.

Station KLRN-DT • as Channel 8 • San Antonio, Texas

Station KTMV-LP, N08, San Antonio, OET-69 Interference Study (with KLRN-DT as D08 and KIII-DT as D08)

```
Interference analysis
tvixstudy 2.3.2

Station parameters:
          Station: N08 KTMV-LP LIC
             City: CORPUS CHRISTI, TX
      Coordinates: N  27-45-09.0
                   W  97-27-18.0
      Height AMSL:  101.0 m
      Maximum ERP: 0.200 kW
  Azimuth pattern: SCA-HDCA-10-8
      Orientation: 120.0
Elevation pattern: OET-69 generic
    Service level: 68.0 dBu

++Warning - some records had missing or bad data:

N09 XERV LIC     Below-ground AGL height, adjusted to 2m AGL
```

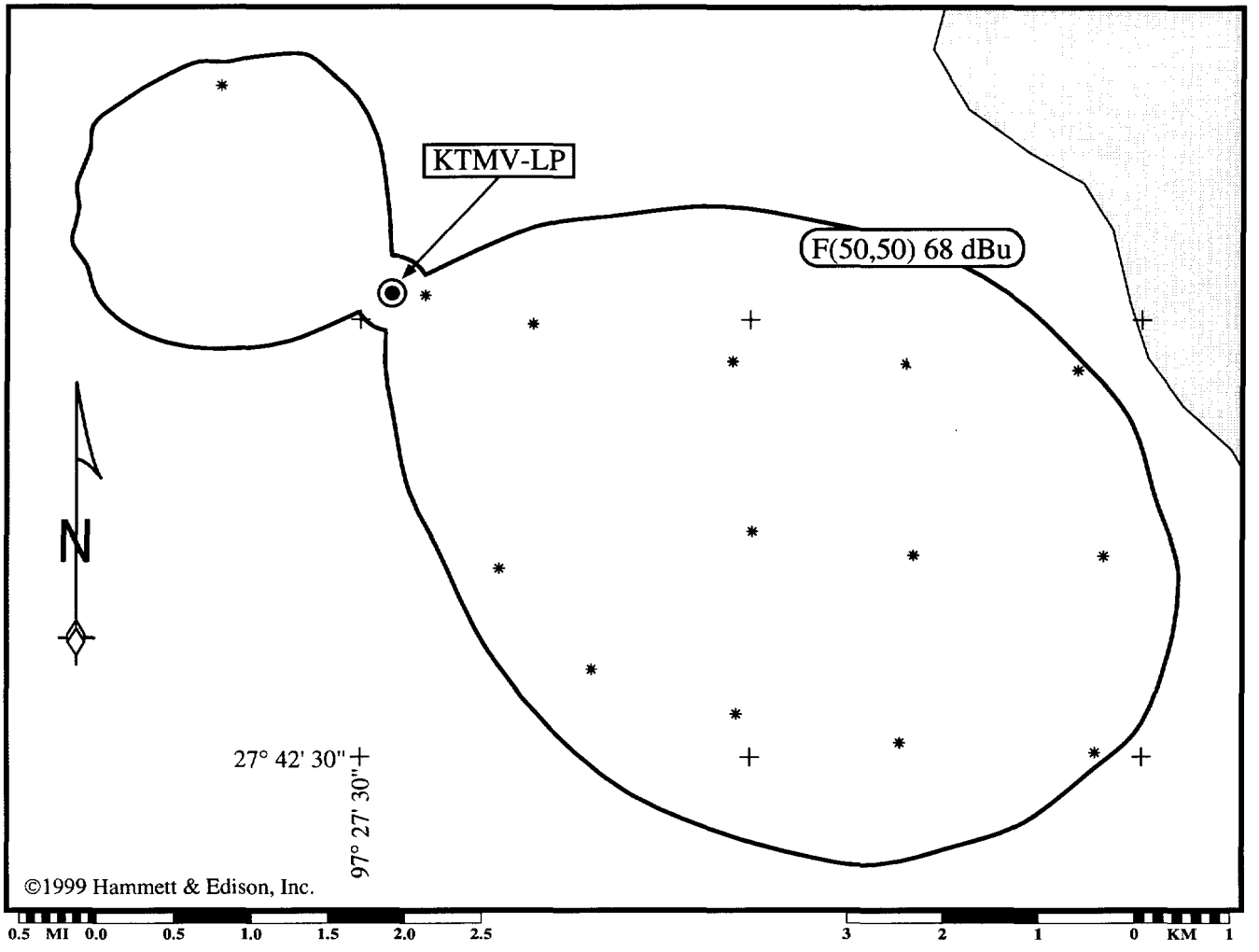
Protected station		Base Pop	IX Change	%Base	Unique IX
N08 KUHT LIC	HOUSTON, TX	3,872,876	20,607	0.5	0
N08 KGNSTV LIC	LAREDO, TX	137,032	2,716	2.0	0
N09 KLRN LIC	SAN ANTONIO, TX	1,505,658	13,144	0.9	0
D08 KIIIDT allot*	CORPUS CHRISTI, TX	490,000	-2,604	-0.5	0
D08 KLRNDT allot*	SAN ANTONIO, TX	1,510,000	53,478	3.5	0

```
* Modified station parameters:
                   --Modified---------------  --Original---------------
          Station: D08 KIIIDT allot           D47 KIIIDT allot
             City: CORPUS CHRISTI, TX         CORPUS CHRISTI, TX
      Coordinates: N  27-39-30.0              N  27-39-29.0
                   W  97-36-04.0              W  97-36-04.0
      Height AMSL:  302.0 m                    275.0 m
      Maximum ERP:   160 kW                    1000 kW
  Azimuth pattern: THV-C135-8az.pat           DTV1393 (replication)
      Orientation:  90.0                       0.0
Elevation pattern: OET-69 generic             OET-69 generic
    Service level: 36.0 dBu                   41.7 dBu

* Modified station parameters:
                   --Modified---------------  --Original---------------
          Station: D08 KLRNDT allot           D20 KLRNDT allot
             City: SAN ANTONIO, TX            SAN ANTONIO, TX
      Coordinates: N  29-19-38.0              N  29-19-33.0
                   W  98-21-17.0              W  98-21-25.0
      Height AMSL:  434.0 m                    455.0 m
      Maximum ERP:  8.30 kW                    827 kW
  Azimuth pattern: THV-6A8-Raz.pat            DTV1471 (replication)
      Orientation: 315.0                       0.0
Elevation pattern: OET-69 generic             OET-69 generic
    Service level: 36.0 dBu                   39.3 dBu
```

Station KLRN-DT • as Channel 8 • San Antonio, Texas

OET-69 Coverage Study for Station KTMV-LP, N08, Corpus Christi with KLRN-DT as D08 and with KIII-DT as D08



* = Interference (with population in cell)
⊕ = Longley-Rice error cell

Map data taken from Sectional Aeronautical Charts, published by the National Ocean Survey. Geographic coordinate marks shown at 2.5-minute increments.

HAMMETT & EDISON, INC.
CONSULTING ENGINEERS
SAN FRANCISCO

991120
Figure 8C

Station KLRN-DT • as Channel 8 • San Antonio, Texas

Station KtMV-LP, N08, San Antonio, OET-69 Coverage Study (with KLRN-DT as D08 and KIII-DT as D08)

Coverage analysis
tvcovstudy 2.3.2

Station parameters:

Station:	N08 KTMV-LP LIC
City:	CORPUS CHRISTI, TX
Coordinates:	N 27-45-09.0
	W 97-27-18.0
Height AMSL:	101.0 m
Maximum ERP:	0.200 kW
Azimuth pattern:	SCA-HDCA-10-8
Orientation:	120.0
Elevation pattern:	OET-69 generic
Service level:	68.0 dBu

		Total IX		Unique IX	
Interfering station		Area,km2	Population	Area,km2	Population
N08 KUHT LIC	HOUSTON, TX	0.0	0	0.0	0
N08 KGNSTV LIC	LAREDO, TX	0.0	0	0.0	0
D08 KIIIDT allot*	CORPUS CHRISTI, TX	56.0	81,224	56.0	81,224
D08 KLRNDT allot*	SAN ANTONIO, TX	0.0	0	0.0	0

Service conditions	Area,km2	Population
Noise-limited service	56.0	81,224
Terrain-limited service	56.0	81,224
Interference-free service	0.0	0
Longley-Rice errors	0.0	0

* Modified station parameters:

	--Modified--	--Original--
Station:	D08 KIIIDT allot	D47 KIIIDT allot
City:	CORPUS CHRISTI, TX	CORPUS CHRISTI, TX
Coordinates:	N 27-39-30.0	N 27-39-29.0
	W 97-36-04.0	W 97-36-04.0
Height AMSL:	302.0 m	275.0 m
Maximum ERP:	160 kW	1000 kW
Azimuth pattern:	THV-C135-8az.pat	DTV1393 (replication)
Orientation:	90.0	0.0
Elevation pattern:	OET-69 generic	OET-69 generic
Service level:	36.0 dBu	41.7 dBu

* Modified station parameters:

	--Modified--	--Original--
Station:	D08 KLRNDT allot	D20 KLRNDT allot
City:	SAN ANTONIO, TX	SAN ANTONIO, TX
Coordinates:	N 29-19-38.0	N 29-19-33.0
	W 98-21-17.0	W 98-21-25.0
Height AMSL:	434.0 m	455.0 m
Maximum ERP:	8.30 kW	827 kW
Azimuth pattern:	THV-6A8-Raz.pat	DTV1471 (replication)
Orientation:	315.0	0.0
Elevation pattern:	OET-69 generic	OET-69 generic
Service level:	36.0 dBu	39.3 dBu

CERTIFICATE OF SERVICE

I, James S. Bucholz, do hereby certify that the foregoing Petition for Rule Making was delivered, via hand delivery or first-class mail (except as otherwise indicated), this 22nd day of November, 1999, to the following:

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dc-182986